D H E C

PROMOTE PROTECT PROSPER

South Carolina Department of Health and Environmental Control

Office of Environmental Quality Control
Bureau of Air Quality
Title V Operating Permit

Forterra Brick, LLC – Columbia Facility
5100 Brickyard Road
Columbia, South Carolina 29230
Richland County
(Permit Updated 12/17/2013 & 02/16/2016)

In accordance with the provisions of the *Pollution Control Act*, Sections 48-1-50(5) and 48-1-110(a), the 1976 *Code of Laws of South Carolina*, as amended, and *South Carolina Regulation 61-62, Air Pollution Control Regulations and Standards,* the Bureau of Air Quality authorizes the operation of this facility and the equipment specified herein in accordance with valid construction permits, and the plans, specifications, and other information submitted in the Title V permit application received on July 2, 2010, as amended.

The operation of this facility is subject to and conditioned upon the terms, limitations, standards, and schedules contained herein or as specified by this permit and its accompanying attachments.

Permit Number: TV-1900-0010

Issue Date:	**September 19, 2012**	**Effective Date:**	**October 1, 2012**
Expiration Date:	**September 30, 2017**	**Renewal Due Date:**	**March 31, 2017**

Director, Engineering Services Division
Bureau of Air Quality

RECORD OF REVISIONS		
Date	**Type**	**Description of Change**
12/17/13	AA	Condition 6.D.1, Monitoring/Record Keeping/Reporting/Other was modified so that "Calculations shall be performed on a monthly basis…" instead of a "yearly" basis.
02/16/16	AA	Name Change from Hanson Brick to Forterra Brick. The template was updated as well.

AA Administrative Amendment
MM Minor Modification
SM Significant Modification

A. EMISSION UNIT DESCRIPTION

Emission Unit ID	Emission Unit Description
01-14	**VOID**
15	Plant 2: Crushing, Grinding, and Screening Operations (some NSPS sources)
16	Plant 2: Brick Making
17	Plant 2: Brick Dryers and Kilns
18	Plant 2: Coal Grinding
19	Plant 4: Crushing, Grinding, and Screening Operations (some NSPS sources)
20	Plant 4: Brick Making
21	Plant 4: Brick Dryers and Kilns
22	Plant 2: Shapes Making Room

B EQUIPMENT AND CONTROL DEVICE(S)

B.1 EQUIPMENT FOR EMISSION UNIT ID 15 - PLANT 2: CRUSHING, GRINDING, AND SCREENING OPERATIONS (SOME NSPS SOURCES)

Equipment ID	Equipment Description	Installation Date/ Modification Date	Control Device ID	Emission Point ID
--	***Manning Clay Dump Station/Crushing Shed:***	--	--	--
1-1	Clay Hopper w/42" wide clay tray feeder: fed by Front End Loader or Truck	Before 1971	None	Fugitive
1-2	McClanahan Single Roll Crusher, with a design capacity of 350 TPH*	1953	None	Fugitive
1-3	Belt under 1-2 Crusher	Before 1971	None	Fugitive
--	***Manning Clay Shed:***	--	--	--
1-4	Shuttle Belt feeding Manning Clay Stockpile or 1-5 Scalping Screen.	Before 1971	None	Fugitive
1-5	Double Deck Scalping Screen; feeds tailings to Manning Clay stockpile and/or Manning Coatings Shed. NSPS, Subpart OOO	2000	None	Fugitive
1-6	1-6 Conveyor Tail Section; fed sized material from 1-5 Scalping Screen NSPS, Subpart OOO	2000	None	Fugitive
--	***Manning Coating Shed:***	--	--	--
1-6	1-6 Conveyor Head Section; feeds Manning coatings onto stockpile NSPS, Subpart OOO	2000	None	Fugitive
--	***Kaolin Clay Dump Station and Crushing Shed:***	--	--	--
2-1	Clay Hopper w/42” wide tray feeder: feed by Front End Loader or Truck	Before 1971	None	Fugitive
2-2	Eagle Twin Roll Crusher, with a design capacity of 350 TPH*	1953/2000	None	Fugitive
2-3	Belt Conveyor under 2-2; feeds Kaolin Stockpile in Kaolin Shed.	Before 1971	None	Fugitive
--	***#2 Grinding Feed Shed***	--	--	--
2H-1	Hopper with Vibratory Feeder; feeds Belt 2G1-1.	Before 1971	None	Fugitive

B.1 EQUIPMENT FOR EMISSION UNIT ID 15 - PLANT 2: CRUSHING, GRINDING, AND SCREENING OPERATIONS (SOME NSPS SOURCES)

Equipment ID	Equipment Description	Installation Date/ Modification Date	Control Device ID	Emission Point ID
2H-2	Hopper with Vibratory Feeder; feeds Belt 2G1-1.	Before 1971	None	Fugitive
2H-3	Hopper with Vibratory Feeder; feeds Belt 2G1-1.	Before 1971	None	Fugitive
2H-4	Hopper with Vibratory Feeder; feeds Belt 2G2-1.	Before 1971	None	Fugitive
2H-5	Hopper with Vibratory Feeder; feeds Belt 2G2-1.	Before 1971	None	Fugitive
2H-6	Hopper with Vibratory Feeder; feeds Belt 2G2-1.	Before 1971	None	Fugitive
2G1-0	Spillage Conveyor: fed hopper spillage by man via shovel; feeds 2G1-1 Conveyor	Before 1971	None	Fugitive
2G1-1	Belt fed by any combination of 2H-1, 2H-2 and 2H-3 hoppers; feeds 2H-7 Pant Leg Hopper.	Before 1971	None	Fugitive
2G2-0	Spillage Conveyor: fed hopper spillage by man via shovel; feeds a bin or loader bucket.	Before 1971	None	Fugitive
2G2-1	Belt fed by any combination of 2H-4, 2H-5 and 2H-6: feeds 2H-7 Pant Leg Hopper	Before 1971	None	Fugitive
--	***#2 Grinding Shed:***	--	--	--
2H-7	Pant Leg Hopper with Vibratory Feeders: fed by 2G1-1 or 2G2-1; feeds 2G1-2 or 2G2-SS Scalper	Before 1971	None	Fugitive
2G1-2	Belt between Pant Leg Hopper and Scalping Screen.	Before 1971	None	Fugitive
2G1-SS	Single Deck Scalping Screen fed by 2G1-2; feeds tailings to #1 Pan Grinder and sized materials to Belt 2G1-3	Before 1971	None	Fugitive
2PG-1	Plant 2, #1 Pan Grinder: fed tailings from 2G1-SS and Belt 2G1-5; feeds Belt 2G1-3, with a design capacity of 80 TPH.	1953	None	Fugitive
2G1-3	Belt under Pan Grinder: fed by 2PG-1 Pan Grinder and 2G1-SS Scalper; feeds Screens 2G1-S1 through 2G1-S5 via plows with leftover fines chuted to 2G1-6.	Before 1971	None	Fugitive
2G1-S1	Vibrating Screen fed by Belt 2G1-3; feeds tailings to Belt 2G1-4 and sized material to Belt 2G1-6	Before 1971	None	Fugitive
2G1-S2	Vibrating Screen fed by Belt 2G1-3; feeds tailings to Belt 2G1-4 and sized material to Belt 2G1-6	Before 1971	None	Fugitive
2G1-S3	Vibrating Screen fed by Belt 2G1-3; feeds tailings to Belt 2G1-4 and sized material onto Belt 2G1-6**	Before 1971/2004	None	Fugitive
2G1-S5	Midwestern Screen fed by Belt 2G1-3; feeds tailings to Belt 2G1-4; sized material onto Belt 2G1-6 NSPS, Subpart OOO**	2000	None	Fugitive
2G1-4	Belt fed tailings from Screens 2G1-S1 through 2G1-S5; feeds Belt 2G-12. NSPS, Subpart OOO	2000	None	Fugitive
2G1-5	Belt fed tailings from 2G1-4; feeds 2PG-1 via chute. NSPS, Subpart OOO	2000	None	Fugitive
2G1-6	Belt fed sized material from Screens 2G1-S1 through 2G1-S5 and 2G1-3; feeds 2G1-7 or Vista stockpile.	Before 1971	None	Fugitive
2G2-SS	Single Deck Scalping screen fed by 2H-7; feeds tailings to #2 Pan Grinder and sized materials to Belt 2G-15***	1989	None	Fugitive
2PG-2	Plant 2, #2 Pan grinder; fed tailings from 2G2-SS and Belt 2G2-5; feeds Belt 2G-15, with a design capacity of 80 TPH.	Before 1971	None	Fugitive

B.1 EQUIPMENT FOR EMISSION UNIT ID 15 - PLANT 2: CRUSHING, GRINDING, AND SCREENING OPERATIONS (SOME NSPS SOURCES)

Equipment ID	Equipment Description	Installation Date/ Modification Date	Control Device ID	Emission Point ID
2G2-3	Belt under 2PG-2: fed by 2PG-2 Pan Grinder and 2G2-SS Scalper; feeds Screens 2G2-S1 through 2G2-S5 via plows with leftover fines onto 2G2-6.	Before 1971	None	Fugitive
2G2-S1	Vibrating Screen fed by Belt 2G2-3; feeds tailings to Belt 2G2-4; sized material to Belt 2G2-6.	Before 1971	None	Fugitive
2G2-S2	Vibrating Screen fed by Belt 2G2-3; feeds tailings to Belt 2G2-4; sized material to Belt 2G2-6.	Before 1971	None	Fugitive
2G2-S3	Vibrating Screen fed by Belt 2G2-3; feeds tailings to Belt 2G2-4 and sized material Belt 2G2-6 NSPS, Subpart OOO**	2005	None	Fugitive
2G2-S5	Midwestern screen fed by Belt 2G2-3; feeds tailings to Belt 2G2-4; sized material onto Belt 2G2-6 NSPS, Subpart OOO**	2000	None	Fugitive
2G2-4	Belt fed tailings from Screens 2G2-S1 through 2G2-S5 NSPS, Subpart OOO	2000	None	Fugitive
2G2-5	Belt fed tailings from 2G2-4; feeds 2PG-2 Pan Grinder via chute. NSPS, Subpart OOO	2000	None	Fugitive
2G2-6	Belt sized material from Screens 2G2-S1 thru 2G2-S5 and 2G2-3; Belt feeds 2G2-7 or 2G1-7.	Before 1971	None	Fugitive
2G2-7	Crossover Belt fed sized material from 2G2-6; feeds 2G1-6 (located outside).	Before 1971	None	Fugitive
--	***Vista Storage Shed:***	--	--	--
2G1-6	Conveyor Head Section; feeds 2G1-7 or Vista stockpile.	Before 1971	None	Fugitive
2G1-7	Conveyor Tail Section: fed by 2G1-6 or 2G2-6; feeds shuttle Belt 2G1-8 in Red/Brown storage shed	Before 1971	None	Fugitive
--	***Red/Brown Storage Shed:***	--	--	--
2G1-7	Conveyor Head Section; feeds shuttle Belt 2G1-8 in Red/Brown storage shed	Before 1971	None	Fugitive
2G1-8	Shuttle Belt feeds red and brown ground storage stockpiles.	Before 1971	None	Fugitive

*Crusher 1 (ID 1-2)and 2 (ID 2-2), were installed 1953. Crusher 2 was replaced with "like-for-like" in 2000 with a crusher that was manufactured in 1965. Hence, crushers 1 and 2 are exempt from NSPS, Subpart A and OOO.
**In accordance with 40 CFR Part 60.670(d)(1), these are NSPS affected facilities, but are exempt from the provisions of 60.672, 60.674 and 60.675.
***Manufactured prior to 1971, hence exempt from NSPS, Subpart A and OOO.

B.2 EQUIPMENT FOR EMISSION UNIT ID 16 - PLANT 2: BRICK MAKING

Equipment ID	Equipment Description	Installation Date/ Modification Date	Control Device ID	Emission Point ID
--	***ES-P2BRKMAK – Plant 2 Mill Room 1 Coatings Preparation and Application Equipment (Controlled by 05)***	--	--	--
2-1 VHF-1	Plant 2 Mill Room 1 Vibratory Coatings Hopper Feeder #1; fed by super sack or hopper; feeds extruded brick column	2009	05	P2BRKMAK
2-1 VHF-2	Plant 2 Mill Room 1 Vibratory Coatings Hopper Feeder #2; fed by super sack or hopper; feeds extruded brick column	2009	05	P2BRKMAK
2-1 VHF-3	Plant 2 Mill Room 1 Vibratory Coatings Hopper Feeder #3; fed by super sack or hopper; feeds extruded brick column	2009	05	P2BRKMAK
2-1 VHF-4	Plant 2 Mill Room 1 Vibratory Coatings Hopper Feeder #4; fed by super sack or hopper; feeds extruded brick column	2009	05	P2BRKMAK
2-1 VHF-5	Plant 2 Mill Room 1 Vibratory Coatings Hopper Feeder #5; fed by super sack or hopper; feeds extruded brick column	2009	05	P2BRKMAK
2-2 VHF-1	Plant 2 Mill Room 2 Vibratory Coatings Hopper Feeder #1; fed by super sack or hopper; feeds extruded brick column	2009	05	P2BRKMAK
2-2 VHF-2	Plant 2 Mill Room 2 Vibratory Coatings Hopper Feeder #2; fed by super sack or hopper; feeds extruded brick column	2009	05	P2BRKMAK
2-2 VHF-3	Plant 2 Mill Room 2 Vibratory Coatings Hopper Feeder #3; fed by super sack or hopper; feeds extruded brick column	2009	05	P2BRKMAK
2-2 VHF-4	Plant 2 Mill Room 2 Vibratory Coatings Hopper Feeder #4; fed by super sack or hopper; feeds extruded brick column	2009	05	P2BRKMAK
2-2 VHF-5	Plant 2 Mill Room 2 Vibratory Coatings Hopper Feeder #5; fed by super sack or hopper; feeds extruded brick column	2009	05	P2BRKMAK
--	***Plant 2 Mill Room Feed Operation***	--	--	--
2-1MM	Plant 2 Mill Room 1 Mud Mixer/Auger Feeder: fed by fork lift with self dumping hopper; feeds Mud Box above extruded green brick column	Before 1986	None	Fugitive
2-2MM	Plant 2 Mill Room 2 Mud Mixer/Auger Feeder: fed by fork lift with self dumping hopper; feeds Mud Box above extruded green brick column	Before 1986	None	Fugitive
2MR1-HF	Plant 2 Mill Room #1 Hopper/Feeder: Even Clay Feeder: fed by front end loader; feeds 2MR1-C1 Conveyor	Before 1986	None	Fugitive
2MR1-C1	Mill Room #1 - Conveyor #1: fed by 2MR1-HF and/or 2AF1-1, 2AF1-2, 2AF1-3, and/or 2AAB	Before 1986	None	Fugitive
2MSA-1	Plant 2 Manganese Silo Auger #1: fed by 2MS; feeds 2AF1-1 and/or 2AF2-1	After 1986	None	Fugitive
2AF1-1	Mill Room #1 Additive Feeder #1: may be fed manganese from hand held bags; feeds 2MR1-C1	Before 1986	None	Fugitive
2AF1-2	Mill Room #1 Additive Feeder #2: may be fed soda ash from hand held bags; feeds 2MR1-C1	Before 1986	None	Fugitive
2AF1-3	Mill Room #1 Additive Feeder #3: may be fed iron oxide from hand held bags; feeds 2MR1-C1	Before 1986	None	Fugitive
2MR2-HF	Plant 2 Mill Room #2 Hopper/Feeder: Even Clay Feeder: fed by front end loader; feeds 2MR2-C1 Conveyor	Before 1986	None	Fugitive
2MR2-C1	Mill Room #2 - Conveyor #1: fed by 2MR2-HF, 2AF2-1, 2AF2-2, and/or 2AAC	Before 1986	None	Fugitive
2AF2-1	Mill Room #2 Additive Feeder #1: fed manganese from 2MSA-1 and/or 2AAB; feeds 2MR2-C1	Before 1986	None	Fugitive

B.2 EQUIPMENT FOR EMISSION UNIT ID 16 - PLANT 2: BRICK MAKING

Equipment ID	Equipment Description	Installation Date/ Modification Date	Control Device ID	Emission Point ID
2AF2-2	Mill Room #2 Additive Feeder #2: may be fed soda ash from hand held bags; feeds 2MR2-C1	Before 1986	None	Fugitive
2AH	Plant 2 Additive Hopper (alternate): fed manganese from 1 ton super sacks: feeds 2AAA	Before 1986	None	Fugitive
2AAA	Plant 2 Additive Auger A: fed by 2AH; feeds 2AAB and/or 2AAC	Before 1986	None	Fugitive
2AAB	Plant 2 Additive Auger B: fed by 2AAA; feeds 2MR1-C1	Before 1986	None	Fugitive
2AAC	Plant 2 Additive Auger C: fed by 2AAA; feeds 2MR2-C1	Before 1986	None	Fugitive
2MR2-P1	Plant 2 Mill Room 2 - Pugmill #1; fed by 2MR2-C1 and water spray; feeds 2MR2-PC	Before 1986	None	Fugitive
2MR2-PC	Plant 2 Mill Room 2 Pugmill Conveyor: fed wet body mix from 2MR2P1; feeds 2MR2-P2	Before 1986	None	Fugitive
2MR2-P2	Plant 2 Mill Room 2 - Pugmill #2: fed by 2MR2-PC; feeds 2MR2-E	Before 1986	None	Fugitive
2MR2-E	Plant 2 Mill Room 2 - Extruder: fed by 2MR2-P2; produces continuous green brick column.	Before 1986	None	Fugitive
2MR1-P1	Plant 2 Mill Room 1 - Pugmill #1; fed by 2MR1-C1 and water spray; feeds 2MR1-P2	Before 1986	None	Fugitive
2MR1-P2	Plant 2 Mill Room 1 - Pugmill #2: fed by 2MR1-P1; feeds 2MR1-E	Before 1986	None	Fugitive
2AHF	Manganese Hopper/Feeder: fed fork lift with super sacks, drums, or bags containing manganese; feeds 2MSA-1	After 1986	None	Fugitive
2MR1-E	Plant 2 Mill Room 1 - Extruder: fed by 2MR1-P2; produces continuous green brick column	Before 1986	None	Fugitive

B.3 CONTROL DEVICE(S) FOR EMISSION UNIT ID 16 - PLANT 2: BRICK MAKING

Control Device ID	Control Device Description	Installation Date/ Modification Date	Pollutant(s) Controlled
05	Cartridge Dust Collector: fed dust from the following drop points: (2MR-CAE) Plant 2 Mill Rooms 1 & 2 Coatings Application Equipment. Exhausts into the Plant #2 Mill Room Manufacturing Building, 100% capture, 99% efficiency. This is a voluntary control device; therefore, no monitoring conditions apply.	After 1986	PM

B.4 EQUIPMENT FOR EMISSION UNIT ID 17 - PLANT 2: BRICK DRYERS AND KILNS

Equipment ID	Equipment Description	Installation Date/ Modification Date	Control Device ID	Emission Point ID
ES-P2BD	Two Dryers at Plant 2 (no supplemental burners)	1953	None	ES-P2BD
ES-P2K1	Plant 2, Kiln 1, 27.1 million BTU/hr	1953	None	ES-P2K1
ES-P2K2	Plant 2, Kiln 2, 27.1 million BTU/hr	1958	None	ES-P2K2

B.5 EQUIPMENT FOR EMISSION UNIT ID 18 - PLANT 2: COAL GRINDING

Equipment ID	Equipment Description	Installation Date/ Modification Date	Control Device ID	Emission Point ID
ES-P2CG	Coal Grinder	1983	P2CGBH	P2CG

B.6 CONTROL DEVICE(S) FOR EMISSION UNIT ID 18 - PLANT 2: COAL GRINDING

Control Device ID	Control Device Description	Installation Date/ Modification Date	Pollutant(s) Controlled
P2CGBH	Pulse Jet Baghouse	1983	PM_{10}; PM

B.7 EQUIPMENT FOR EMISSION UNIT ID 19 - PLANT 4: CRUSHING, GRINDING, AND SCREENING OPERATIONS (SOME NSPS SOURCES)

Equipment ID	Equipment Description	Installation Date/ Modification Date	Control Device ID	Emission Point ID
--	***Clay Dump Station and Crushing Shed:***	--	--	--
C-0	Clay Hopper with apron feeder; fed by Front End Loader or Truck; feeds 1RC Crusher.	Before 1971	None	Fugitive
1RC	#1 Roll Crusher, with a maximum design capacity of 350 TPH	1966	None	Fugitive
C-1	C-1 Conveyor fed by 1RC; feeds C-4 Conveyor or 2C-2 Conveyor.	1971	None	Fugitive
C-2	C-2 Belt fed by 2C-2; feeds C-3B shuttle Conveyor in Raw Material Shed.	1971	None	Fugitive
2C-0	Clay Hopper with apron feeder: fed by Front End Loader or Truck; feeds 2RC Crusher**	2002	None	Fugitive
2RC	#2 Roll Crusher, with a design capacity of 350 TPH*	2003	None	Fugitive
2C-1	2C-1 Conveyor fed by 2RC; feeds 2C-2 Conveyor NSPS, Subpart OOO	2003	None	Fugitive
2C-2	2C-2 Conveyor fed by 2C-1 and/or C-1: feeds C-2 Conveyor NSPS, Subpart OOO	2003	None	Fugitive
--	***Raw Material Storage Shed:***	--	--	--
C-4	Fed by C-1; feeds C-3A NSPS, Subpart OOO	2005	None	Fugitive
C-3A	Fed by C-4; feeds the crushed clay stockpiles ****	Before 1971/2005	None	Fugitive
C-3B	Fed by C-2; feeds the crushed clay stockpiles ****	Before 1971/2005	None	Fugitive
--	***Grinding Room Shed:***	--	--	--
1HF	Hopper/Feeder; fed clays from mix pile via front-end loader; feeds Belt 4G-1.	Before 1971	None	Fugitive
2HF	Hopper/Feeder; fed clays from mix pile via front-end loader; feeds Belt 4G-1.	Before 1971	None	Fugitive
3HF	Hopper/Feeder; fed clays from mix pile via front-end loader; feeds Belt 4G-1.	Before 1971	None	Fugitive
4TF	Tank/Feeder (auger type): Marble Dust Additive pumped directly into Tank	Before 1971	None	Fugitive
4G-1	Belt 4G-1 fed by 1HF, 2HF, 3HF and/or 4TF Hopper/Feeders: feeds 4STC via chute	Before 1971	None	Fugitive

B.7 EQUIPMENT FOR EMISSION UNIT ID 19 - PLANT 4: CRUSHING, GRINDING, AND SCREENING OPERATIONS (SOME NSPS SOURCES)

Equipment ID	Equipment Description	Installation Date/ Modification Date	Control Device ID	Emission Point ID
4STC	Stedman Crusher: Model 5460: fed by 4G-1 and 4G-4 belts via chute: feeds 4G-3 NSPS, Subpart OOO	2006	None	Fugitive
4G-3	Belt under 4STC Stedman Crusher; fed by 4STC; feeds screens 4VS-1 through 4VS-7 via plows.	Before 1971	None	Fugitive
4VS-1	Vibrating Screen: fed by Belt 4G-3; feeds tailings to Belt 4G-4; sized material onto Belt 4G-7	Before 1971	None	Fugitive
4VS-2	Vibrating Screen: fed by Belt 4G-3; feeds tailings to Belt 4G-4; sized material onto Belt 4G-7	Before 1971	None	Fugitive
4VS-5	Vibrating Screen: fed by Belt 4G-3; feeds tailings to Belt 4G-4; sized material onto Belt 4G-7	Before 1971	None	Fugitive
4VS-7	Vibrating Screen: fed by Belt 4G-3; feeds tailings to Belt 4G-4; sized material onto Belt 4G-7	Before 1971	None	Fugitive
4VS-3	Midwestern Screen: fed by Belt 4G-3; feeds tailings to Belt 4G-4; sized material onto Belt 4G-7***	2004	None	Fugitive
4VS-6	Midwestern Screen fed by Belt 4G-3; feeds tailings to Belt 4G-4; sized material onto Belt 4G-7***	2000	None	Fugitive
4G-4	Belt fed tailings from 4VS-1 through 4VS-7 screens; feeds 4STC chute	Before 1971	None	Fugitive
4G-7	Belt fed sized material from 4VS-1 through 4VS-7: feeds 4G-10 or 4G-12	Before 1971	None	Fugitive
4G-10	Belt fed sized material from 4G-7; feeds shuttle belt 4G-11	Before 1971	None	Fugitive
4G-11	Fed by 4G-10; Shuttle Belt feeding Ground Storage Stockpiles	Before 1971	None	Fugitive
4G-12	Conveyor 4G-12 fed sized material from belt 4G-7; feeds Conveyor 4G-13 NSPS, Subpart OOO	2000	None	Fugitive
4G-13	Conveyor 4G-13 Tail Section fed sized material from Conveyor Belt 4G-12 in Tank Building; NSPS, Subpart OOO	2000	None	Fugitive
--	***Tank Building:***	--	--	--
4G-13	Conveyor 4G-13 Head Section: feeds Belt 4G-14 in Tank Building NSPS, Subpart OOO	2000	None	Fugitive
4G-14	Conveyor 4G-14 fed sized material from Belt 4G-13; feeds Shuttle Conveyor 4G-15 NSPS, Subpart OOO	2000	None	Fugitive
4G-15	Shuttle Conveyor 4G-15 fed sized material from Belt 4G-14; feeds any of six ground storage tanks NSPS, Subpart OOO	2000	None	Fugitive
1GST	#1 Ground Storage Tank, 100 ton storage capacity NSPS, Subpart OOO	2000	None	Fugitive
2GST	#2 Ground Storage Tank, 100 ton storage capacity NSPS, Subpart OOO	2000	None	Fugitive
3GST	#3 Ground Storage Tank, 100 ton storage capacity NSPS, Subpart OOO	2000	None	Fugitive
4GST	#4 Ground Storage Tank, 100 ton storage capacity NSPS, Subpart OOO	2000	None	Fugitive

B.7 EQUIPMENT FOR EMISSION UNIT ID 19 - PLANT 4: CRUSHING, GRINDING, AND SCREENING OPERATIONS (SOME NSPS SOURCES)

Equipment ID	Equipment Description	Installation Date/ Modification Date	Control Device ID	Emission Point ID
5GST	#5 Ground Storage Tank, 100 ton storage capacity NSPS, Subpart OOO	2000	None	Fugitive
6GST	#6 Ground Storage Tank, 100 ton storage capacity NSPS, Subpart OOO	2000	None	Fugitive

*Crusher 2 was installed in 2003. This crusher was manufactured in 1965. Hence, the crusher is exempt from NSPS, Subpart A and OOO.

**Feeder exempt from NSPS, Subpart OOO.

*** In accordance with 40 CFR Part 60.670(d)(1), these are NSPS affected facilities, but are exempt from the provision of 60.672, 60.674 and 60.675.

**** Conveyor C-3 was physically modified to make Conveyors C-3A and C-3B. However, the change did not qualify as a modification or reconstruction under NSPS; hence the change was exempt from NSPS, Subparts A and OOO.

B.8 EQUIPMENT FOR EMISSION UNIT ID 20 - PLANT 4: BRICK MAKING

Equipment ID	Equipment Description	Installation Date/ Modification Date	Control Device ID	Emission Point ID
--	***ES-P4BRKMAK – Controlled – Plant 4 Mill Room 1 Coatings Preparation and Application Equipment***	--	--	--
4-1CC-1	Plant 4 Mill Room 1 Coatings Conveyor #1: fed by fork lift with self dumping hopper; feeds 4-1VHF-1, 4-1VHF-2, 4-1VHF-3, or 4-1VHF-4	Before 1971	06	ES-P4BRKMAK
4-1VHF-1	Plant 4 Mill Room 1 Vibratory Coatings Hopper Feeder #1: fed by 4-1CC-1, shovel or bucket; feeds extruded brick column	Before 1971	06	ES-P4BRKMAK
4-1VHF-2	Plant 4 Mill Room 1 Vibratory Coatings Hopper Feeder #2: fed by 4-1CC-1, shovel or bucket; feeds extruded brick column	Before 1971	06	ES-P4BRKMAK
4-1VHF-3	Plant 4 Mill Room 1 Vibratory Coatings Hopper Feeder #3: fed by 4-1CC-1, shovel or bucket; feeds extruded brick column	Before 1971	06	ES-P4BRKMAK
4-1VHF-4	Plant 4 Mill Room 1 Vibratory Coatings Hopper Feeder #4: fed by shovel or bucket; feeds extruded brick column	Before 1971	06	ES-P4BRKMAK
4-1SC	Plant 4 Mill Room 1 Slug Cutter: fed the extruded green brick column w/coatings already applied; feeds 4-1OBB	Before 1971	06	ES-P4BRKMAK
4-1OBB	Plant 4 Mill Room 1 Off Bearing Belt: fed slugs from 4-1SC; feeds 4-1ASET	Before 1971	06	ES-P4BRKMAK
4-1ASET	Plant 4 Mill Room 1 Auto Setter: fed slugs from 4-1OBB; feeds cut green brick onto kiln cars	Before 1971	06	ES-P4BRKMAK
--	***ES-P4BRKMAK – Uncontrolled – Plant 4 Coatings Preparation***	--	--	--
4SS-1A	Sand Silo #1 Auger: fed by IA-T-SS; feeds 4CHF-1 Hopper/Feeder	After 1986	None	Fugitive
4SS-2A	Sand Silo #2 Auger: fed by IA-T-SS; feeds 4CHF-1 Hopper/Feeder	After 1986	None	Fugitive

B.8 EQUIPMENT FOR EMISSION UNIT ID 20 - PLANT 4: BRICK MAKING

Equipment ID	Equipment Description	Installation Date/ Modification Date	Control Device ID	Emission Point ID
4CHF-1	Coatings Hopper	After 1986	None	Fugitive
4CDM	Coatings Drum Mixer: fed by 4CHF-1: feeds 4CC-1 Conveyor	After 1986	None	Fugitive
4CC-1	Coatings Conveyor #1: fed by 4CDM; feeds 4CC-2 Conveyor	After 1986	None	Fugitive
4CC-2	Coatings Conveyor #2: fed by 4CC-1; feeds into super sack or self dumping hopper	After 1986	None	Fugitive
4CRM	Coatings Ribbon Mixer (Alternate Mixing): fed by self dumping hopper and forklift and/or hand held bags containing additives; feeds into super sack or self dumping hopper	Before 1986	None	Fugitive
4-2VHF-1	Plant 4 Mill Room 2 Vibratory Coatings Hopper Feeder #1: fed by shovel or bucket; feeds extruded brick column	Before 1971	None	Fugitive
4-2VHF-2	Plant 4 Mill Room 2 Vibratory Coatings Hopper Feeder #2: fed by shovel or bucket; feeds extruded brick column	Before 1971	None	Fugitive
4-2LAM	Plant 4 Mill Room 2 Liquid Application Mixer: fed by shovel or bucket and water; feeds 4-2LAF	Before 1971	None	Fugitive
4-2LAF	Plant 4 Mill Room 2 Liquid Application Feeder: fed by 4-2LAM; feeds extruded green brick column	Before 1971	None	Fugitive
--	***Plant 4 Mill Room #1 Feed Operation***	--	--	--
MR1-HF1	Plant 4 Mill Room #1 Hopper/Feeder #1: fed by front end loader; feeds 4MR1-C1 Conveyor	Before 1986	None	Fugitive
MR1-HF2	Plant 4 Mill Room #1 Hopper/Feeder #2: fed by front end loader; feeds 4MR1-C1 Conveyor	Before 1986	None	Fugitive
MR1-HF3	Plant 4 Mill Room #1 Hopper/Feeder #3: fed by front end loader; feeds 4MR1-C1 Conveyor	Before 1986	None	Fugitive
4MR1-C1	Mill Room #1 - Conveyor #1: fed by 4MR1-HF1, 4MR1-HF2, and/or 4MR1-HF3 and/or 1-AF-6, and/or 1-AF-5	After 1986	None	Fugitive
1-AF-6	Plant 4 Mill Room #1 Additive Feeder #6: fed manganese from 4-1MSA-2 and/or 4-1AA-B; feeds 4MR1-C1	2009	None	Fugitive
1-AF-5	Plant 4 Mill Room #1 Additive Feeder #5: may be fed soda ash from hand held bags; feeds 4MR1-C1	Before 1986	None	Fugitive
4-1MSA-1	Plant 4 Manganese Silo #1 Auger #1: fed by IA-ES-MT1; feeds 4-1MSA-2	After 1986	None	Fugitive
4-1MSA-2	Plant 4 Manganese Silo #1 Auger #2: fed by 4-1MSA-1 and/or 4-1AA-B; feeds 1-AF-6, and/or MR1-SSAF.	Before 1986	None	Fugitive
4-1AH	Plant 4 Mill Room 1 Additive Hopper (alternate): fed manganese from 1 ton super sacks: feeds 4-1AA-A	Before 1986	None	Fugitive
4-1AA-A	Plant 4 Mill Room 1 Additive Auger A: fed by 4-1AH; feeds 4-1AA-B	Before 1986	None	Fugitive
4-1AA-B	Plant 4 Mill Room 1 Additive Auger B: fed Manganese by 4-1AA-A; feeds 4-1MSA-2	Before 1986	None	Fugitive
MR1-SHF	Plant 4 Mill Room 1 Surge Hopper/Feeder, 30" wide belt feeder: fed by 4MR1-C1 and green brick waste return conveyor (not listed); feeds 4-1PUG	Before 1986	None	Fugitive
4-1PUG	Plant 4 Mill Room 1 Pugmill: fed by MR1-SHF and water spray; feeds 4-1E Extruder	Before 1986	None	Fugitive
4-1E	Plant 4 Mill Room 1 - Extruder: fed by 4-1PUG; produces continuous green brick column	Before 1986	None	Fugitive

B.8 EQUIPMENT FOR EMISSION UNIT ID 20 - PLANT 4: BRICK MAKING

Equipment ID	Equipment Description	Installation Date/ Modification Date	Control Device ID	Emission Point ID
MR1-SSHF	Plant 4 Mill Room 1 Special Shapes Hopper/Feeder, 36" wide Belt Feeder: fed by front end loader; feeds MR1-SSC1	Before 1986	None	Fugitive
MR1-SSAF	Plant 4 Mill Rom 1 Special Shapes Additive Feeder: fed manganese from 4-1MSA-2; feeds MR1-SSC1	Before 1986	None	Fugitive
MR1-SSC-1	Plant 4 Mill Room 1 Special Shapes Conveyor #1: fed ground material from MR1-SSHF and/or additives from MR1-SSAF; feeds 1SSPUG	Before 1986	None	Fugitive
1SSPUG	Plant 4 Mill Room 1 Special Shapes Pugmill: fed by MR1-SSC-1 and water spray; feeds 1-SSE Extruder SSC-1 and water spray; feeds 1-SSE Extruder	Before 1986	None	Fugitive
1SSE	Plant 4 Mill Room 1 - Extruder: fed by 1SSPUG; produces continuous green brick column	Before 1986	None	Fugitive
--	***Plant 4 Mill Room #2 Feed Operations***	--	--	--
MR2-1BF	Plant 4 Mill Room 2, #1 Belt Feeder: fed by 100 ton 1GST; feeds MR2-C7	2000	None	Fugitive
MR2-2BF	Plant 4 Mill Room 2, #2 Belt Feeder: fed by 100 ton 2GST; feeds MR2-C7	2000	None	Fugitive
MR2-3BF	MR2-3BF Plant 4 Mill Room 2, #3 Belt Feeder: fed by 100 ton 3GST; feeds MR2-C7	2000	None	Fugitive
MR2-4BF	Plant 4 Mill Room 2, #4 Belt Feeder: fed by 100 ton 4GST; feeds MR2-C7	2000	None	Fugitive
MR2-5BF	Plant 4 Mill Room 2, #5 Belt Feeder: fed by 100 ton 5GST; feeds MR2-C7	2000	None	Fugitive
MR-2-6BF	Plant 4 Mill Room 2, #6 Belt Feeder: fed by 100 ton 6GST; feeds MR2-C7	2000	None	Fugitive
MR2-C7	Plant 4 Mill Room 2 Conveyor #7: fed ground material from MR2-1BF, MR2-2BF, MR2-3BF, MR2-4BF, MR2-5BF, and/or MR2-6BF; feeds 2-SHF-C8	2000	None	Fugitive
2-SHF-C8	2-SHF-C8 Plant 4 Mill Room 2 Surge Hopper/Feeder: fed by MR2-C7; feeds MR2-C9	2000	None	Fugitive
MR2-C9	Plant 4 Mill Room 2 Conveyor #9: fed by 2-SHF-C8 and/or 2-AF-1 and/or 2-AF-6; feeds 4-2PUG-1 and/or MR2-C10	After 1986	None	Fugitive
2-AF-1	Plant 4 Mill Room 2 Additive Feeder #1: may be fed soda ash from hand held bags; feeds MR2-C9	Before 1986	None	Fugitive
2-AF-6	Plant 4 Mill Room 2 Additive Feeder #6: fed manganese from 4-2MSA-2; feeds MR2-C9	2008	None	Fugitive
4-2MSA-1	Plant 4 Manganese Silo #2 Auger #1: fed by IA-ES-MT2; feeds 4-2MSA-2	After 1986	None	Fugitive
4-2MSA-2	Plant 4 Manganese Silo #2 Auger #2: fed by 4-2MSA-1 and/or 4-2AA-A; feeds 2-AF-6 and/or 4-2AH-2	Before 1986	None	Fugitive
4-2AH-1	Plant 4 Mill Room 2 Additive Hopper#1:alternate supply of manganese; 1 ton super sacks or hopper: feeds 4-2AA-A	Before 1986	None	Fugitive
4-2AA-A	Plant 4 Mill Room #2 Additive Auger A: fed manganese from 4-2AH-1; feeds 4-2MSA-2	Before 1986	None	Fugitive
4-2AH-2	Plant 4 Mill Room 2 Additive Hopper #2: receives excess manganese from 4-2MSA-2; may be exchanged with 4-2AH-1	Before 1986	None	Fugitive
MR2-C10	Plant 4 Mill Room 2 Conveyor#10: fed by MR2-C9 and/or 4-2PUG-1; feeds 4-2PUG-2	Before 1986	None	Fugitive

B.8 EQUIPMENT FOR EMISSION UNIT ID 20 - PLANT 4: BRICK MAKING

Equipment ID	Equipment Description	Installation Date/ Modification Date	Control Device ID	Emission Point ID
4-2PUG-1	Plant 4 Mill Room 2 - Pugmill #1: fed by MR2-C9 and waste conveyor (not listed); feeds MR2-C10	Before 1986	None	Fugitive
4-2PUG-2	4-2PUG-2 Plant 4 Mill Room 2 - Pugmill #2; fed by MR2-C10 and water spray; feeds MR2-E	Before 1986	None	Fugitive
MR2-E	Plant 4 Mill Room 2 Extruder: fed by 4-2PUG-2; produces a continuous green brick column	Before 1986	None	Fugitive

B.9 CONTROL DEVICE(S) FOR EMISSION UNIT ID 20 - PLANT 4: BRICK MAKING

Control Device ID	Control Device Description	Installation Date/ Modification Date	Pollutant(s) Controlled
06	Dust Collector - This is a voluntary control device; therefore, no monitoring conditions apply.	1992	PM_{10}; PM

B.10 EQUIPMENT FOR EMISSION UNIT ID 21 - PLANT 4: BRICK DRYERS AND KILNS

Equipment ID	Equipment Description	Installation Date/ Modification Date	Control Device ID	Emission Point ID
ES-P4BD	Four Dryers at Plant 4 (no supplemental burners) (ID #0, ID #1, ID #2, ID #3)	1990 (ID #0) 1966 (ID #1, ID #2, ID #3)	None	EP-P4BD
ES-P4K1	Plant 4, Kiln 1, 27.1 million BTU/hr	1966	02	P4SCRB
ES-P4K2	Plant 4, Kiln 2, 27.1 million BTU/hr	1966	02	P4SCRB

B.11 CONTROL DEVICE(S) FOR EMISSION UNIT ID 21 - PLANT 4: BRICK DRYERS AND KILNS

Control Device ID	Control Device Description	Installation Date/ Modification Date	Pollutant(s) Controlled
02	Dry Lime Adsorption Scrubber	1998	HF

B.12 EQUIPMENT FOR EMISSION UNIT ID 22 - PLANT 2: SHAPES MAKING ROOM

Equipment ID	Equipment Description	Installation Date/ Modification Date	Control Device ID	Emission Point ID
--	***ES-2SMR - Plant 2, Shapes Making Room, Uncontrolled Sources***	--	--	--
2SMAHF	Plant 2 Shapes Making Additive Hopper Feeder #1: fed Manganese Dioxide via Hopper or Super Sack; feeds 2SMAA-2	2007	None	Fugitive
2SMAA-1	Plant 2 Shapes Making Additive Auger #1: fed MnO_2 from 2SMAHF; feeds 2SM-C1	2007	None	Fugitive
2SMPUG	Plant 2 Shapes Making Pugmill; fed by 2SM-C2; feeds 2SMEXT	2007	None	Fugitive
2SMEXT	Plant 2 Shapes Making Extruder: fed by 2SMPUG; produces a continuous green brick column	2007	None	Fugitive
2SM-WC1	Plant 2 Shapes Making Waste Conveyor #1: fed trim waste from 2SMEXT; feeds 2SM-WC2	2007	None	Fugitive
2SM-WC2	Plant 2 Shapes Making Waste Conveyor #2: fed trim waste from 2SM-WC1; feeds 2SM-C2, and then back into the PUG.	2007	None	Fugitive

B.12 EQUIPMENT FOR EMISSION UNIT ID 22 - PLANT 2: SHAPES MAKING ROOM

Equipment ID	Equipment Description	Installation Date/ Modification Date	Control Device ID	Emission Point ID
2SM-LA	Plant 2 Shapes Making Liquid Application: liquids containing additives and water.	2007	None	Fugitive
2SMOBC	Plant 2 Shapes Making Off Bearing Conveyor: fed bricks from Reel Cutter; brick shapes are unloaded onto kiln cars by hand, and rejects fall into a self dumping hopper for reuse	2007	None	Fugitive
2SMHF-1	16 hopper w/Disc Feeder: fed by 2SGSC-3; feeds 2SM-C1 Conveyor	2007	None	Fugitive
2SM-C1	Plant 2 Shapes Making Conveyor #1; fed by 2SMHF-1; feeds 2SM-C2	2007	None	Fugitive
2SM-C2	Plant 2 Shapes Making Conveyor #2; fed by 2SM-C1; feeds 2SMPUG	2007	None	Fugitive
2SMCAE	Plant 2 Coating Application Equipment which includes up to 3 vibratory feeders	2007	None	Fugitive

C. LIMITATIONS, MONITORING AND REPORTING CONDITIONS
(S.C. Regulation 61-62.1, Section II; S.C. Regulation 61-62.70.6.a.3.i.B)

Condition Number	Condition
C.1	**Emission Unit ID:** All **Equipment/Control Device ID:** All Equipment capacities provided under the Equipment Description column of the Equipment Tables above are not intended to be permit limits unless otherwise specified within the Table of Conditions for the particular equipment. However, this condition does not exempt the facility from the construction permitting process, from PSD review, nor from any other applicable requirements that must be addressed prior to increasing production rates.
C.2	**Emission Unit ID:** All **Equipment/Control Device ID:** All (S.C. Regulation 61-62.1, Section II.J.1.g) A copy of the Department issued construction and/or operating permit must be kept readily available at the facility at all times. The owner or operator shall maintain such operational records; make reports; install, use, and maintain monitoring equipment or methods; sample and analyze emissions or discharges in accordance with prescribed methods at locations, intervals, and procedures as the Department shall prescribe; and provide such other information as the Department reasonably may require. All records required to demonstrate compliance with the limits established under this permit shall be maintained on site for a period of at least 5 years from the date the record was generated and shall be made available to a Department representative upon request.
C.3	**Emission Unit ID:** 18, 21 **Equipment/Control Device ID:** P2CGBHH and 02 The owner/operator shall inspect, calibrate, adjust, and maintain continuous monitoring systems, monitoring devices, and gauges in accordance with manufacturer's specifications or good engineering practices. The owner or operator shall maintain on file all measurements including continuous monitoring system or monitoring device performance measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required in a permanent form suitable for inspection by Department personnel.

C. LIMITATIONS, MONITORING AND REPORTING CONDITIONS
(S.C. Regulation 61-62.1, Section II; S.C. Regulation 61-62.70.6.a.3.i.B)

Condition Number	Condition
C.4	**Emission Unit ID:** 18, 21 **Equipment/Control Device ID:** P2CGBHH and 02 All gauges shall be readily accessible and easily read by operating personnel and Department personnel (i.e. on ground level or easily accessible roof level). Monitoring parameter readings (i.e., pressure drop readings, etc.) and inspection checks shall be maintained in logs (written or electronic), along with any corrective action taken when deviations occur. Each incidence of operation outside the operational ranges, including date and time, cause, and corrective action taken, shall be recorded and kept on site. Exceedance of operational range shall not be considered a violation of an emission limit of this permit, unless the exceedance is also accompanied by other information demonstrating that a violation of an emission limit has taken place. Reports of these incidences shall be submitted semiannually. If no incidences occurred during the reporting period then a letter shall indicate such. Any alternative method for monitoring control device performance must be preapproved by the Bureau and shall be incorporated into the permit as set forth in SC Regulation 61-62.70.7.
C.5	**Emission Unit ID:** 21 **Equipment/Control Device ID:** 02, ES-P4K1, and ES-P4K2 **Monitoring/Record Keeping/Reporting/Other:** The owner/operator shall continue to operate and maintain pressure drop indicators on the Plant 4 Kilns (ES-P4K1 and ES-P4K2) scrubber module at Emission Unit ID 21, 02. Each parameter shall be recorded each shift during source operation. The scrubber shall be in place and operational whenever processes controlled by the scrubber are running, except during periods of scrubber malfunction or mechanical failure. Operational ranges for the monitored parameters have been established to provide a reasonable assurance of compliance. These operational ranges for the monitored parameters were derived from stack test data, vendor certification, and/or operational history and visual inspections, which demonstrate the proper operation of the equipment in compliance. The facility shall maintain previously established operational ranges for these monitored parameters. The operating ranges may be updated using this procedure, following submittal to the Bureau.
C.6	**Emission Unit ID:** 18 **Equipment/Control Device ID:** PCCGBH The owner/operator shall continue to operate and maintain pressure drop gauge on each module of the baghouse at Emission Unit 18 – Plant 2: Coal Grinding (P2CGBH). Pressure drop readings shall be recorded weekly during source operation. The baghouse shall be in place and operational whenever processes controlled by the baghouse are running, except during periods of baghouse malfunction or mechanical failure. Operational ranges for the monitored parameters have been established to provide a reasonable assurance of compliance. These operational ranges for the monitored parameters were derived from stack test data, vendor certification, and/or operational history and visual inspections, which demonstrate the proper operation of the equipment in compliance. The facility shall maintain previously established operational ranges for these monitored parameters. The operating ranges may be updated using this procedure, following submittal to the Bureau. The following operation and maintenance checks will be made on at least a weekly basis for all baghouses: a) The baghouse cleaning systems will be checked for proper operation. b) Check dust collection hoppers and conveying systems for proper operation.

C. LIMITATIONS, MONITORING AND REPORTING CONDITIONS
(S.C. Regulation 61-62.1, Section II; S.C. Regulation 61-62.70.6.a.3.i.B)

<table>
<tr><th>Condition Number</th><th>Condition</th></tr>
<tr><td>C.7</td><td>
Emission Unit ID: 15, 16, 17, 18, 19, 20, 21, 22

Equipment/Control Device ID: All Equipment

(S.C. Regulation 61-62.5, Standard No. 4, Section VIII) Particulate matter emissions shall be limited to the rate specified by use of the following equations:
For process weight rates less than or equal to 30 tons per hour
$E = (F)\ 4.10P^{0.67}$ and
For process weight rates greater than 30 tons per hour
$E = (F)\ 55.0P^{0.11} - 40$
Where E = the allowable emission rate in pounds per hour
P = process weight rate in tons per hour
F = effect factor from Table B in S.C. Regulation 61-62.5, Standard No. 4

For the purposes of compliance with this condition, the process boundaries are defined as follows:

<table>
<tr><th>Process</th><th>Process Weight Rate (tons/hr)</th></tr>
<tr><td>Plant 2, Raw Material Receiving, Crushing, and Storage – 1-1, 1-2, 1-3, 1-4, 2-1, 2-2, 2-3, 1-5, 1-6</td><td>350</td></tr>
<tr><td>Plant 2, Grinding & Screening – 2H-1, 2H-2, 2H-3, 2H-4, 2H-5, 2H-6, 2G1-0, 2G1-1, 2G2-0, 2G2-1, 2H-7, 2G1-2, 2G1-SS, 2PG-1, 2G1-3, 2G1-S1, 2G1-S2, 2G1-6, 2G2-SS, 2PG-2, 2G2-3, 2G2-S1, 2G2-S2, 2G2-6, 2G2-7, 2G1-6, 2G1-7, 2G1-8, 2G1-S3, 2G1-S5, 2G1-4, 2G1-5, 2G2-S3, 2G2-S5, 2G2-4, 2G2-5</td><td>160</td></tr>
<tr><td>Plant 2 Brick Making – 2-1 MM, 2-2 MM, 2MR1-HF, 2MR1-C1, 2MSA-1, 2AHF, 2AF1-1, 2AF1-2, 2AF1-3, 2MR2-HF, 2MR2-HF, 2MR2-C1, 2AF2-1, 2AF2-2, 2AH, 2AAA, 2AAB, 2AAC, 2MR2-P1, 2MR2-PC, 2MR2-P2, 2MR2-E, 2MR1-P1, 2MR1-P2, 2MR1-E</td><td>154.1</td></tr>
<tr><td>Plant 2 Mill Room 1 Coatings Preparation – 2-1VHF-1, 2-1 VHF-2, 2-1 VHF-3, 2-1 VHF-4, 2-1 VHF-5, 2-2 VHF-1, 2-2 VHF-2, 2-2 VHF-3, 2-2 VHF-4, 2-2 VHF-5</td><td>2.25</td></tr>
<tr><td>ES-P2K1</td><td>11.3</td></tr>
<tr><td>ES-P2K2</td><td>11.3</td></tr>
<tr><td>ES-P2BD</td><td>22.6</td></tr>
<tr><td>ES-P2CG</td><td>2.00</td></tr>
<tr><td>Plant 2, Raw Material Receiving, Crushing, and Storage - C-0, 1RC, 2C-0, 2RC, C-1, C-2, C3-A, C3-B, 2C-1, 2C-2, C-4</td><td>350</td></tr>
</table>
</td></tr>
</table>

C. LIMITATIONS, MONITORING AND REPORTING CONDITIONS
(S.C. Regulation 61-62.1, Section II; S.C. Regulation 61-62.70.6.a.3.i.B)

<table>
<tr><th>Condition Number</th><th>Condition</th></tr>
<tr><td></td><td>
<table>
<tr><td>Plant 2, Grinding & Screening – 1HF, 2HF, 3HF, 4TF, 4G-1, 4G-3, 4VS-1, 4VS-2, 4VS-5, 4VS-7, 4G-4, 4G-7, 4G-10, 4G-11, 4STC, 4VS-3, 4VS-6, 4G-12, 4G-13, 4G-14, 4G-15, 1GST, 2GST, 3GST, 4GST, 5GST, 6GST</td><td>160</td></tr>
<tr><td>Plant 4 Mill Room 1 Coating Preparation and Application Equipment – 4-1CC-1, 4-VHF-1, 4-VHF-2, 4-VHF-3, 4-VHF-4, 4-ISC, 4-1OBB, 4-1ASET</td><td>2.25</td></tr>
<tr><td>Plant 4 Brick Making Operations – 4SS-1, 4SS-2, 4SS-1A, 4SS-2A, 4CHF-1, 4CDM, 4CC-1, 4CC-2, 4CRM, 4-2VHF-1, 4-2VHF-2, 4-2LAM, 4-2LAF, MR1-HF1, MR1-HF2, MR1-HF3, 4MR1-C1, 1-AF-6, 1-AF-5, 4MS1, 4-1MSA-1, 4-1MSA-2, 4-1AH, 4-1AA-A, 4-1AA-B, MR1-SHF, 4-1PUG, 4-1E, MR1-SSHF, MR1-SSAF, MR1-SSC-1, 1SSPUG, 1SSE, MR2-1BF, MR2-2BF, MR2-3BF, MR2-4BF, MR2-5BF, MR-2-6BF, MR2-C7, 2-SHF-C8, MR2-C9, 2-AF-1, 2-AF-6, 4MS2, 4-2MSA-1, 4-2MSA-2, 4-2AH-1, 4-2AA-A, 4-2AH-2, MR2-C10, 4-2PUG-1, 4-2PUG-2, MR2-E</td><td>154.1</td></tr>
<tr><td>ES-P4K1</td><td>11.3</td></tr>
<tr><td>ES-P4K2</td><td>11.3</td></tr>
<tr><td>Shapes Making Room</td><td>6.5</td></tr>
</table>
</td></tr>
<tr><td>C.8</td><td>Visual inspection means a qualitative observation of opacity during daylight hours. The observer does not need to be certified to conduct valid visual inspections. However, at a minimum, the observer should be trained and knowledgeable about the effects on visibility of emissions caused by background contrast, ambient lighting, and observer position relative to lighting, wind, and the presence of uncombined water.</td></tr>
<tr><td>C.9</td><td>Emission Unit ID: 15, 16, 19, 20, 22

Equipment/Control Device ID: All Equipment

(S.C. Regulation 61-62.5, Standard No. 4, Section IX) Where construction or modification began after December 31, 1985, emissions from these sources (including fugitive emissions) shall not exhibit an opacity greater than 20%, each.

The owner/operator shall perform visual inspections of the crushers and grinding and screening buildings at Emission Unit 15 and 19 on a weekly basis during source operation. Logs shall be kept to record all visual inspections, noting color, duration, density (heavy or light), cause, and corrective action taken for any abnormal emissions. If a source did not operate during the required visual inspection time frame, the log shall indicate such. The owner/operator shall submit semiannual reports. The report shall include records of abnormal emissions, if any, and corrective actions taken. If the unit did not operate during the semiannual period, the report shall state so.

The owner/operator shall perform a visual inspection of the Plant 2 Brick Making building at Emission Unit 16, Plant 4 Brick Making building at Emission Unit 20, and Plant 2 Shapes Making Room building on a quarterly basis during source operation. Logs shall be kept to record all visual inspections, noting color, duration, density (heavy or light), cause, and corrective action taken for any abnormal emissions. If a source did not operate during the required visual inspection time frame, the log shall indicate such. The owner/operator shall submit semiannual reports. The report shall</td></tr>
</table>

C. LIMITATIONS, MONITORING AND REPORTING CONDITIONS
(S.C. Regulation 61-62.1, Section II; S.C. Regulation 61-62.70.6.a.3.i.B)

Condition Number	Condition
	include records of abnormal emissions, if any, and corrective actions taken. If the unit did not operate during the semiannual period, the report shall state so.
C.10	**Emission Unit ID:** 15, 19 **Equipment/Control Device ID:** 1-5, 1-6, 2G1-4, 2G1-5, 2G2-4, 2G2-5, 2C-1, 2C-2, C-4, 4G-12, 4G-13, 4G-14, 4G-15, 1GST, 2GST, 3GST, 4GST, 5GST, 6GST, 4STC In accordance with 40 CFR 60 Subpart A – General Conditions, Section 60.11 – Compliance with Standards and Maintenance Requirements, and Subpart OOO - Standards Of Performance For Nonmetallic Mineral Processing Plants, Section 60.672(b) – Standard for Particulate Matter, Table 3 – Fugitive Emission Limits, for affected facilities (as defined in 60.670 and 60.671) that commenced construction, modification, or reconstruction after August 31, 1983 but before April 22, 2008, the owner or operator must meet the following fugitive emissions limit for grinding mills, screening operations, bucket elevators, transfer points on belt conveyors, bagging operations, storage bins, enclosed truck or railcar loading stations or from any other affected facility (as defined in 60.670 and 60.671): 10 percent opacity. The owner/operator shall perform visual inspections of the crushers and grinding and screening buildings at Emission Unit 15 and 19 on a weekly basis during source operation. Logs shall be kept to record all visual inspections, noting color, duration, density (heavy or light), cause, and corrective action taken for any abnormal emissions. If a source did not operate during the required visual inspection time frame, the log shall indicate such. The owner/operator shall submit semiannual reports. The report shall include records of abnormal emissions, if any, and corrective actions taken. If the unit did not operate during the semiannual period, the report shall state so.
C.11	**Emission Unit ID:** 17, 18 **Equipment/Control Device ID:** ES-P2K1, ES-P2K2, ES-P2BD, ES-P2CG, P2CGBH (S.C. Regulation 61-62.5, Standard No. 4, Section IX) Where construction or modification began on or before December 31, 1985, emissions from these sources (including fugitive emissions) shall not exhibit an opacity greater than 40%, each. The owner/operator shall perform a visual inspection on a daily basis during coal combustion and coal grinding operation. No periodic monitoring for opacity will be required during periods of burning natural gas or propane only. Logs shall be kept to record all visual inspections, noting color, duration, density (heavy or light), cause, and corrective action taken for any abnormal emissions. If a source did not operate during the required visual inspection time frame, the log shall indicate such. The owner/operator shall submit semiannual reports. The report shall include records of abnormal emissions, if any, and corrective actions taken. If only natural gas or propane was combusted or if the unit did not operate during the semiannual period, the report shall state so.
C.12	**Emission Unit ID:** 21 **Equipment/Control Device ID:** ES-P4K1, ES-P4K2, ES-P4BD (ID#1, #2, #3) (S.C. Regulation 61-62.5, Standard No. 4, Section IX) Where construction or modification began on or before December 31, 1985, emissions from these sources (including fugitive emissions) shall not exhibit an opacity greater than 40%, each.
C.13	**Emission Unit ID:** 21 **Equipment/Control Device ID:** ES-P4BD (ID #0)

C. LIMITATIONS, MONITORING AND REPORTING CONDITIONS

(S.C. Regulation 61-62.1, Section II; S.C. Regulation 61-62.70.6.a.3.i.B)

<table>
<tr><th>Condition Number</th><th>Condition</th></tr>
<tr><td></td><td>(S.C. Regulation 61-62.5, Standard No. 4, Section IX) Where construction or modification began after December 31, 1985, emissions from this source (including fugitive emissions) shall not exhibit an opacity greater than 20%, each.</td></tr>
<tr><td>C.14</td><td>Emission Unit ID: 17, 21

Equipment/Control Device ID: ES-P2K1, ES-P2K2, ES-P2BD, ES-P4K1, ES-P4K2, ES-P4BD

While burning contaminated soil within the kilns the owner/operator is subject to Standard 3, Section III(L). No soil containing hazardous waste is allowed to be utilized and the usage of contaminated soil must be approved by the Bureau on a case-by-case basis, with prior approval from the Bureau. All of the contaminated soil from one clean-up site must be used, prior to bringing any new soil from another site. The contaminated soil must be properly stored on concrete pads (or equivalent), sheltered from any rainfall. The contaminated soil is to be utilized within the manufacturing of bricks, and is not allowed to be disposed of in any other way.

While burning contaminated soil, the owner/operator is subject to the following emission limitations:

<table>
<tr><td>Nickel</td><td>0.006 lb/million Btu heat input</td></tr>
<tr><td>Cadmium</td><td>0.0001 lb/million Btu heat input</td></tr>
<tr><td>Chromium</td><td>0.00074 lb/million Btu heat input</td></tr>
<tr><td>Arsenic</td><td>0.0017 lb/million Btu heat input</td></tr>
<tr><td>Lead</td><td>0.005 lb/million Btu heat input</td></tr>
<tr><td>Hydrochloric Acid</td><td>0.45 lb/million Btu heat input</td></tr>
</table>

State Only: Yes

When processing contaminated soil, the owner/operator must keep records of amount, type and dates of when each batch is received and processed, including start and completion dates for each batch. The owner/operator shall maintain all records, including soil purchase orders, contaminants analysis, and invoices, etc. on-site. All recorded parameters and calculated values shall be submitted no later than thirty (30) days after the completion of processing each batch.</td></tr>
<tr><td>C.15</td><td>Emission Unit ID: 17

Equipment/Control Device ID: ES-P2K1, ES-P2K2

Kilns #1 and #2, ES-P2K1, ES-P2K2, at Plant 2 (Emission Unit 17) burn only coal and natural gas or propane. The kilns at Plant 2 have a physical limitation of burning 20% natural gas or 20% propane and 80% coal. The kilns are designed and set-up to burn only natural gas or propane for 20% of the kiln’s required heat input and coal for the remaining 80% of the required heat input. Coal sulfur content shall be less than or equal to 1 percent by weight, and the average ash content shall be less than or equal to 5 percent by weight.

The owner/operator shall obtain coal supplier certifications for each shipment of coal received on site. Calculations shall be performed on a monthly basis, using a 12 month rolling sum, showing that the average sulfur content is less than or equal to 1% by weight; and the average ash content is less than or equal to 5% by weight. The coal supplier certifications and calculations shall be submitted semiannually.</td></tr>
<tr><td>C.16</td><td>Emission Unit ID: 21

Equipment/Control Device ID: ES-P4K1 and ES-P4K2

Kiln #1 and #2 at Plant 4, ES-P4K1 and ES-P4K2 (Emission Unit 21), burn only natural gas or propane as fuels.</td></tr>
<tr><td>C.17</td><td>Emission Unit ID: 21</td></tr>
</table>

C. LIMITATIONS, MONITORING AND REPORTING CONDITIONS

(S.C. Regulation 61-62.1, Section II; S.C. Regulation 61-62.70.6.a.3.i.B)

Condition Number	Condition
	Equipment/Control Device ID: ES-P4K1 and ES-P4K2 For Plant 4: Brick Kiln Equipment ES-P4K1 and ES-P4K2 at Emission Unit 21, the facility is allowed to open and close the bypass damper no more than 1 minute daily. Compliance with this requirement will be demonstrated by keeping records of the dates and times of bypass damper operation on site.

D. NESHAP PERIODIC REPORTING SCHEDULE SUMMARY

NESHAP Part	NESHAP Subpart	Compliance Monitoring Report Submittal Frequency	Reporting Period	Report Due Date
63	ZZZZ (Emergency Generators see note 3 and 4)	N/A	N/A	N/A

1. This table summarizes only the periodic compliance reporting schedule. Additional reports may be required. See specific NESHAP Subpart for additional reporting requirements and associated schedule.
2. This reporting schedule does not supersede any other reporting requirements including but not limited to 40 CFR Part 60, 40 CFR Part 61, 40 CFR Part 63, and/or Title V. The MACT reporting schedule may be adjusted to coincide with the Title V reporting schedule with prior approval from the Department in accordance with 40 CFR Part 63.10.a.5. This request may be made 1 year after the compliance date for the associated MACT standard.
3. Emergency generators are not required to submit reports unless they meet the criteria under 63.6650(h) and must submit reports annually. Only non-emergency engines are required to submit semi annual reports.
4. Emergency engines shall comply with the operations limits specified in 40 CFR 63.6640(f).

E. NESHAP - CONDITIONS

Condition Number	Condition
E.1	All NESHAP notifications and reports shall be sent to the Manager of the Air Toxics Section, South Carolina Department of Health and Environmental Control - Bureau of Air Quality.
E.2	All NESHAP notifications and the cover letter to periodic reports shall be sent to the United States Environmental Protection Agency (US EPA) at the following address: **US EPA, Region 4** **Air, Pesticides and Toxics Management Division** **61 Forsyth Street SW** **Atlanta, GA 30303**

E. NESHAP - CONDITIONS

Condition Number	Condition
E.3	Emergency power generators less than or equal to 150 kilowatt (kW) rated capacity or greater than 150 kW rated capacity designated for emergency use only and operated a total of 500 hours per year or less for testing and maintenance with a method to record the actual hours of use such as an hour meter have been determined to be exempt from construction permitting requirements in accordance with South Carolina Regulation 61-62.1. These sources shall still comply with the requirements of all applicable regulations including but not limited to the following: New Source Performance Standards (NSPS) 40 CFR 60 Subpart A (General Provisions); NSPS 40 CFR 60 Subpart IIII (Stationary Compression Ignition Internal Combustion Engines); NSPS 40 CFR 60 Subpart JJJJ (Stationary Spark Ignition Internal Combustion Engines); National Emission Standards for Hazardous Air Pollutants (NESHAP) 40 CFR 63 Subpart A (General Provisions); and NESHAP 40 CFR 63 Subpart ZZZZ (Stationary Reciprocating Internal Combustion Engines).

F. COMPLIANCE SCHEDULE

Condition Number	Conditions
F.1	Not Applicable

G. PERMIT SHIELD

Condition Number	Condition
G.1	(S.C. Regulation 61-62.70.6.f) A copy of the "applicability determination" submitted with the Part 70 permit application is included as Attachment – Applicable and Non-Applicable Federal and State Regulations. With the exception of those listed below, compliance with the terms and conditions of this permit shall be deemed compliance with the applicable requirements specified in Attachment – Applicable and Non-Applicable Federal and State Regulations as of the date of permit issuance provided that such applicable requirements are included and are specifically identified in the permit. Exceptions to this are stated below in the *Permit Shield Exceptions* Table. The owner or operator shall also be shielded from the non-applicable requirements specified in Attachment – Applicable and Non-Applicable Federal and State Regulations. Exceptions to this are stated below in the *Permit Shield Exceptions* Table.

Permit Shield Exceptions
South Carolina Regulation 61-62.5, Standard 2: Ambient Air Quality Standards
South Carolina Regulation 61-62.5, Standard 3: Waste Combustion/Reduction
South Carolina Regulation 61-62.5, Standard 7: Prevention of Significant Deterioration
South Carolina Regulation 61-62.5, Standard 7.1: Nonattainment New Source Review (NSR)
South Carolina Regulation 61-62.5, Standard 8: Toxic Air Pollutants
South Carolina Regulation 61-62.6: Control of Fugitive Particulate Matter
South Carolina Regulation 61-62.60: SC Designated Facility Plan and NSPS, Subpart A – General Provisions
South Carolina Regulation 61-62.70: Title V Operating Permit Program
South Carolina Regulation 61-86.1: Standards of Performance for Asbestos Projects
40 CFR 60, Standards of Performance for New Stationary Sources, Subpart A – General Provisions

Nothing in the permit shield or in any Part 70 permit shall alter or affect the provisions of Section 303 of the Act, Emergency Orders, of the Clean Air Act; the liability of the owner or operator for any violation of applicable

G. PERMIT SHIELD

Condition Number	Condition
	requirements prior to or at the time of permit issuance; the applicable requirements of the Acid Rain Program, consistent with Section 408.a of the Clean Air Act; or the ability of US EPA to obtain information from a source pursuant to Section 114 of the Clean Air Act. In addition, the permit shield shall not apply to emission units in noncompliance at the time of permit issuance, minor permit modifications (S.C. Regulation 61-62.70.7.e.2), group processing of minor permit modifications (S.C. Regulation 61-62.70.7.e.3), or operational flexibility (S.C. Regulation 61-62.70.7.e.5.i), except as specified in S.C. Regulation 61-62.70.7.e.5.iii.

H. PERMIT FLEXIBILITY

Condition Number	Conditions
H.1	The facility may install, remove, and modify insignificant activities as defined in S.C. Regulation 61-62.70.5.c and exempt sources as listed in S.C. Regulation 61-62.1, Section II.B, without revising or reopening the Title V Operating Permit. A list of insignificant activities/exempt sources must be maintained on site, along with any necessary documentation to support the determination that the activity is insignificant and/or exempt, and shall be made available to a Department representative upon request. The list shall be submitted with the next renewal application.

I. AMBIENT AIR STANDARDS REQUIREMENTS

Condition Number	Condition
I.1	Air dispersion modeling (or other method) has demonstrated that this facility's operation will not interfere with the attainment and maintenance of any state or federal ambient air standard. Any changes in the parameters used in this demonstration may require a review by the facility to determine continuing compliance with these standards. These potential changes include any decrease in stack height, decrease in stack velocity, increase in stack diameter, decrease in stack exit temperature, increase in building height or building additions, increase in emission rates, decrease in distance between stack and property line, changes in vertical stack orientation, and installation of a rain cap that impedes vertical flow. Parameters that are not required in the determination will not invalidate the demonstration if they are modified. The emission rates used in the determination are listed in Attachment - Emission Rates for Ambient Air Standards of this permit. Higher emission rates may be administratively incorporated into Attachment - Emission Rates for Ambient Air Standards of this permit provided a demonstration using these higher emission rates shows the attainment and maintenance of any state or federal ambient air quality standard or with any other applicable requirement. Variations from the input parameters in the demonstration shall not constitute a violation unless the maximum allowable ambient concentrations identified in the standard are exceeded. The owner/operator shall maintain this facility at or below the emission rates as listed in Attachment - Emission Rates for Ambient Air Standards, not to exceed the pollutant limitations of this permit. Should the facility wish to increase the emission rates listed in Attachment - Emission Rates for Ambient Air Standards, not to exceed the pollutant limitations in the body of this permit, it may do so by the administrative process specified above. This is a State Only enforceable requirement.

J. TITLE V PERIODIC REPORTING SCHEDULE

Compliance Monitoring Report Submittal Frequency	Reporting Period (Begins on the effective date of the permit)	Report Due Date
Quarterly	January-March April-June July-September October-December	April 30th July 30th October 30th January 30th
Semiannual	January-June April-September July-December October-March	July 30th October 30th January 30th April 30th
Note: This reporting schedule does not supersede any Federal reporting requirements including but not limited to 40 CFR Part 60, 40 CFR Part 61, and 40 CFR Part 63. All Federal reports must meet the reporting time frames specified in the Federal standard unless the Department or EPA approves a change.		

K. TITLE V COMPLIANCE CERTIFICATION REPORTING SCHEDULE

Title V Compliance Certification Submittal Frequency	Reporting Period (Begins on the effective date of the permit)	Report Due Date
Annual	January-December April-March July-June October-September	February 14th May 15th August 14th November 14th

L. TITLE V RECORD KEEPING AND REPORTING REQUIREMENTS

Condition Number	Condition
L.1	Reporting required in this permit, shall be submitted in a timely manner as directed in the Title V Periodic Reporting Schedule and the Title V Compliance Certification Reporting Schedule of this permit. All required reports must be certified by a responsible official consistent with S.C. Regulation 61-62.70.5.d.
L.2	All reports and notifications required under this permit shall be submitted to the person indicated in the specific condition at the following address: **2600 Bull Street** **Columbia, SC 29201** The contact information for the local EQC Regional office can be found at: **http://www.scdhec.gov**
L.3	Unless elsewhere specified within this permit, all reports required under this permit shall be submitted to the Manager of the Technical Management Section, Bureau of Air Quality.
L.4	All Title V Annual Compliance Certifications shall be sent to the US EPA, Region 4, Air Enforcement Branch and to the Manager of the Technical Management Section, Bureau of Air Quality. **US EPA, Region 4** **Air Enforcement Branch** **61 Forsyth Street SW** **Atlanta, GA 30303**

L. TITLE V RECORD KEEPING AND REPORTING REQUIREMENTS

Condition Number	Condition
L.5	(S.C. Regulation 61-62.70.6.a.3.ii) The owner or operator shall comply, where applicable, with the following monitoring/support information collection and retention record keeping requirements: 1. Records of required monitoring information shall include the following: a. The date, place as defined in the permit, and time of sampling or measurements; b. The date(s) analyses were performed; c. The company or entity that performed the analyses; d. The analytical techniques or methods used; e. The results of such analyses; and f. The operating conditions as existing at the time of sampling or measurement; 2. Records of all required monitoring data and support information shall be retained for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.
L.6	In accordance with S.C. Regulation 61-62.1, Section II.J, for sources not required to have continuous emissions monitors, any malfunction of air pollution control equipment or system, process upset or other equipment failure which results in discharges of air contaminants lasting for one hour or more and which are greater than those discharges described for normal operation in the permit application shall be reported to the Department's local Environmental Quality Control (EQC) Regional office within twenty-four (24) hours after the beginning of the occurrence. The owner or operator shall also submit a written report within thirty (30) days of the occurrence. This report shall be submitted to the Manager of the Technical Management Section, Bureau of Air Quality (BAQ) and shall include, at a minimum, the following: 1. The identity of the stack and/or emission point where the excess emissions occurred; 2. The magnitude of excess emissions expressed in the units of the applicable emission limitation and the operating data and calculations used in determining the excess emissions; 3. The time and duration of excess emissions; 4. The identity of the equipment causing the excess emissions; 5. The nature and cause of such excess emissions; 6. The steps taken to remedy the malfunction and the steps taken or planned to prevent the recurrence of such malfunction; 7. The steps taken to limit the excess emissions; and, 8. Documentation that the air pollution control equipment, process equipment, or processes were at all times maintained and operated, to the maximum extent practicable, in a manner consistent with good practice for minimizing emissions.
L.7	(S.C. Regulation 61-62.70.6.c.5.iii) The responsible official shall certify, annually, compliance with the conditions of this permit as required under S.C. Regulation 61-62.70.6.c. The compliance certification shall include the following: 1. The identification of each term or condition of the permit that is the basis of the certification. 2. The identification of the method(s) or means used by the owner or operator for determining the compliance status with each term and condition of the permit during the certification period. 3. The status of compliance with the terms and conditions of the permit for the period covered by the certification, including whether compliance during the period was continuous or intermittent. The certification shall be based on the method or means designated in S.C. Regulation 61-62.70.6.c.5.iii.B. The certification shall identify each deviation and take it into account in the compliance certification. 4. Such other facts as the Department may require to determine the compliance status of the source.

L. TITLE V RECORD KEEPING AND REPORTING REQUIREMENTS

Condition Number	Condition
L.8	(S.C. Regulation 61-62.1, Section II.M) Within 30 days of the transfer of ownership/operation of a facility, the current permit holder and prospective new owner or operator shall submit to the Director of Engineering Services a written request for transfer of the source operating or construction permits. The written request for transfer of the source operating or construction permit shall include any changes pertaining to the facility name and mailing address; the name, mailing address, and telephone number of the owner or operator for the facility; and any proposed changes to the permitted activities of the source. Transfer of the operating or construction permits will be effective upon written approval by the Department.

M. GENERAL FACILITY WIDE

Condition Number	Condition
M.1	The owner or operator shall comply with S.C. Regulation 61-62.2 "Prohibition of Open Burning."
M.2	The owner or operator shall comply with S.C. Regulation 61-62.3 "Air Pollution Episodes."
M.3	The owner or operator shall comply with S.C. Regulation 61-62.4 "Hazardous Air Pollution Conditions."
M.4	The owner or operator shall comply with S.C. Regulation 61-62.6 "Control of Fugitive Particulate Matter", Section III "Control of Fugitive Particulate Matter Statewide."
M.5	The owner or operator shall comply with the standards of performance for asbestos abatement operations pursuant to 40 CFR Part 61.145, including, but not limited to, requirements governing training, licensing, notification, work practice, cleanup, and disposal.
M.6	The owner or operator shall comply with the standards of performance for asbestos abatement operations pursuant to S.C. Regulation 61-86.1, including, but not limited to, requirements governing training, licensing, notification, work practice, cleanup, and disposal.
M.7	The owner or operator shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, Protection of Stratospheric Ozone, Recycling and Emissions Reduction, except as provided for motor vehicle air conditioners (MVACs) in Subpart B. If the owner or operator performs a service on motor (fleet) vehicles that involves ozone-depleting substance refrigerant in MVACs, the owner or operator is subject to all applicable requirements of 40 CFR Part 82, Subpart B, Servicing of MVACs.
M.8	(S.C. Regulation 61-62.70.6.a.5) The provisions of this permit are severable, and if any provision of this permit, or application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.
M.9	(S.C. Regulation 61-62.70.6.a.6.i) The owner or operator must comply with all of the conditions of this permit. Any permit noncompliance constitutes a violation of the S.C. Pollution Control Act and/or the Federal Clean Air Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of permit renewal application.
M.10	(S.C. Regulation 61-62.70.6.a.6.ii) It shall not be a defense for an owner or operator in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
M.11	(S.C. Regulation 61-62.70.6.a.6.iii) The permit may be modified, revoked, reopened and reissued, or terminated for cause by the Department. The filing of a request by the owner or operator for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
M.12	(S.C. Regulation 61-62.70.6.a.6.iv) The permit does not convey any property rights of any sort, or any exclusive privilege.
M.13	(S.C. Regulation 61-62.70.6.a.6.v) The owner or operator shall furnish to the Department, within a reasonable time, any information that the Department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the owner or

M. GENERAL FACILITY WIDE

Condition Number	Condition
	operator shall also furnish to the Department copies of records required to be kept by the permit or, for information claimed to be confidential, the owner or operator may furnish such records directly to the Administrator along with a claim of confidentiality. The Department may also request that the owner or operator furnish such records directly to the Administrator along with a claim of confidentiality.
M.14	(S.C. Regulation 61-62.70.6.a.8) No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.
M.15	(S.C. Regulation 61-62.70.6.c.2) Upon presentation of credentials and other documents as may be required by law, the owner or operator shall allow the Department or an authorized representative to perform the following: 1. Enter upon the owner or operator's premises where a Part 70 source is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit. 2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit. 3. Inspect any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit. 4. As authorized by the Act and/or the S.C. Pollution Control Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.
M.16	(S.C. Regulation 61-62.70.6.g) In the case of an emergency, as defined in S.C. Regulation 61-62.70.6.g.1, the owner or operator shall demonstrate an affirmative defense of emergency through properly signed, contemporaneous operating logs, or other relevant evidence that: 1. An emergency occurred and that the owner or operator can identify the cause(s) of the emergency; 2. The permitted facility was at the time being properly operated; and 3. During the period of the emergency the owner or operator took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and 4. The owner or operator shall submit verbal notification of the emergency to the Department within twenty-four (24) hours of the time when emission limitations were exceeded, followed by written notifications within thirty (30) days. This notice fulfills the requirement of S.C. Regulation 61-62.70.6.a.3.iii.B. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken. This provision is in addition to any emergency or upset provision contained in any applicable requirement. In any enforcement proceeding, the owner or operator seeking to establish the occurrence of an emergency has the burden of proof.
M.17	(S.C. Regulation 61-62.70.6.a.1.ii) Where an applicable requirement of the Act is more stringent than an applicable requirement of regulations promulgated under Title IV of the Act, both provisions shall be incorporated into the permit and shall be enforceable by the Administrator.
M.18	(S.C. Regulation 61-62.70.6.a.4) According to S.C. Regulation 61-62.70.6.a.4, the owner or operator is prohibited from emissions exceeding any allowances that the source lawfully holds under Title IV of the Act or the regulations promulgated thereunder. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the acid rain program, provided that such increases do not require a permit revision under any other applicable requirement. No limit shall be placed on the number of allowances held by a source. The source may not, however, use allowances as a defense to noncompliance with any other applicable requirement. Any such allowances shall be accounted for according to the procedures established in regulations promulgated under Title IV of the Act.
M.19	(S.C. Regulation 61-62.70.7.c.1.ii) Permit expiration terminates the source's right to operate unless a timely and complete renewal application has been submitted consistent with S.C. Regulation 61-62.70.5.a.1.iii, 62.70.5.a.2.iv, and 62.70.7.b. In this case, the permit shall not expire until the renewal permit has been issued or denied. All terms and conditions of the permit including any permit shield that may be granted pursuant to S.C. Regulation 61-62.70.6.f shall remain in effect until the renewal permit has been issued or denied.
M.20	Requests for permit modification and amendments shall be submitted on the appropriate Department approved Title V Modification Form(s).

M. GENERAL FACILITY WIDE

Condition Number	Condition
M.21	(S.C. Regulation 61-62.70.6.a.7) The owners or operators of Part 70 sources shall pay fees to the Department consistent with the fee schedule approved pursuant to S.C. Regulation 61-62.70.9. Failure to pay applicable fee can be considered grounds for permit revocation.
M.22	(S.C. Regulation 61-62.1, Section III) The owners or operators of Part 70 sources shall complete and submit a new updated emissions inventory consistent with the schedule approved pursuant to S.C. Regulation 61-62.1, Section III. These Emissions Inventory Reports shall be submitted to the Manager of the Emissions Inventory Section, Bureau of Air Quality. This requirement notwithstanding, an emissions inventory may be required at any time in order to determine the compliance status of any facility.
M.23	This permit expressly incorporates insignificant activities. Emissions from these activities shall be included in the emissions inventory submittals as required by S.C. Regulation 61-62.1, Section III.B.2.g.

ATTACHMENT - Emission Rates for Ambient Air Standards

Forterra Brick, LLC – Columbia Facility
TV-1900-0010

The emission rates listed herein are not considered federally enforceable limitations but are used to evaluate ambient air quality impact. Until the Department makes a determination that a facility is causing or contributing to an exceedance of a state or federal ambient air quality standard, increases to these emission rates are not in themselves considered violations of these ambient air quality standards (see Ambient Air Standards Requirements).

AMBIENT AIR QUALITY STANDARDS - STANDARD NO. 2						
Emission Point ID	**Emission Rates (lbs/hr)**					
	PM_{10}	**$PM_{2.5}$**	**SO_2**	**NO_x**	**CO**	**Lead**
P2K1 – Plant 2 Kiln #1	10.6351	9.83	9.683	5.762	9.940	--
P2K2 – Plant 2 Kiln #2	10.6351	9.83	9.683	5.762	9.940	--
P2CG – Plant 2 Coal Grinder	0.2198	--	---	---	---	--
P2PD – Plant 2 Pre-Dryer	2.1191	--	---	---	---	--
P2D – Plant 2 Brick Dryer	2.1191	--	---	---	---	--
P4SCRB – Plant 4 Scrubber	1.6588	--	2.820	7.913	27.20	--
P2FUG – Plant 2 Misc. Sources	0.1175	--	---	---	---	--
P2GR – Plant 2 Grinding Room	0.3683	--	---	---	---	--
P2RMP – Plant 2 RMP	1.1191	--	---	---	---	--
P4FUG – Plant 4 Misc. Sources	1.5556	--	---	---	---	--
ESP2GS - Plant 2 (Grinding/Screening/Storage Operation)	0.368	0.229	--	--	--	--
ES-P2RMP - Plant 2 (Raw Material Receiving, Crushing, and Storage)	0.532	0.049	--	--	--	--
P2BRKMAK - Plant 2 (Brick Making, Coating Preparation, 05)	0.0081	5.03E-03	--	--	--	--
ES-P2BRKMAK - Plant 2 (Brick Making Operations - Fugitive Sources	0.04	3.53E-03	--	--	--	--
ES-P2CG - Plant 2 (Coal Grinder, P2CGBH)	0.022	0.011	--	--	--	--
ES-P4BRKMAK - Plant 4 (Brick Making Operations)	0.080	7.62E-03	--	--	--	--
ES-P4BRKMAK - Plant 4 (Coatings Preparation and Application, 06)	0.0081	5.03E-03	--	--	--	--
ES-P4GS (Plant 4 Grinding and Screening Room - Fugitive Sources)	0.368	0.229	--	--	--	--
ES-P4RMP - Plant 4 (Crushing and Conveying Operations)	0.585	0.054	--	--	--	--
IA-2AKCCS - Plant 2 (Vacuum System)	0.81	0.39	--	--	--	--
IA-P2VS1 - Plant 2 (Vacuum System 1)	0.059	0.028	--	--	--	--
IA-P2VS2 - Plant 2 (Vacuum System 2)	0.059	0.028	--	--	--	--
IA -P4SV1 - Plant 4 (Vacuum System 1)	0.059	0.028	--	--	--	--
IA-Propane Vaporizer	0.00918	0.00918	2.36E-04	0.17	0.0984	--
IA-ES-P2SH, IA-ES-P4NGB, IA-ES-P4SH (29 Space Heaters and 3 Natural Gas Burners)	0.0138	0.0138	--	--	--	--
IA-MT1, MT2, MT3 (Manganese Dioxide Silos)	1.28	0.797	--	--	--	--

ATTACHMENT - Emission Rates for Ambient Air Standards

Forterra Brick, LLC – Columbia Facility
TV-1900-0010

AMBIENT AIR QUALITY STANDARDS - STANDARD NO. 2						
Emission Point ID	**Emission Rates (lbs/hr)**					
	PM_{10}	**$PM_{2.5}$**	**SO_2**	**NO_x**	**CO**	**Lead**
IA-T-MD1 (Marble Dust Silo)	0.428	0.266	--	--	--	--
IA-T-SS (Sand Silos)	0.856	0.531	--	--	--	--
P2K1 - Plant 2 Kiln 1	--	--	--	--	--	0.0017
P2K2 - Plant 2 Kiln 2	--	--	--	--	--	0.0017
P4SCRB [(1)] - Plant 4, Kiln 1 & Kiln 2	1.650	0.930	--	--	--	0.0034
2CM –Coatings Mixer	0.00005	--	--	--	--	--
ES-2SMR - Plant 2 (Shapes Making Room - Fugitive Sources)	0.00123	1.14E-04	--	--	--	--
ES-2SMR - Plant 2 (Shapes Making Room, Coating Application)	0.234	0.145	--	--	--	--
2AKCCS – Automatic Kiln Car Cleaning System	0.81	--	--	--	--	--
ES-P4MR1CAE (Coatings Preparation and Application Equipment)	0.80	--	--	--	--	--
ES-P2MR1CAE (Coatings Preparation and Application Equipment	0.80	--	--	--	--	--

TOXIC AIR POLLUTANTS - STANDARD NO. 8					
Emission Point ID	**Emission Rates (lbs/hr)**				
	Arsenic 7440-38-2	Benzene 71-43-2	Beryllium 7440-41-7	Bis-(2ethylhexyl) phthalate 117-81-7	Cadmium 7440-43-9
P2K1	0.001254	0.009207	0.000146	0.005183	1.70E-04
P2K2	0.001254	0.009207	0.000146	0.005183	1.70E-04
P4SCRB	0.000701	0.065636	0.00000952	0.045239	3.40E-04

TOXIC AIR POLLUTANTS - STANDARD NO. 8					
Emission Point ID	**Emission Rates (lbs/hr)**				
	Chromium	HCL 7647-01-0	Manganese	Mercury 7439-97-6	Nickel 7440-02-0
P2K1	5.76E-04	1.92	0.003286	0.000889	8.14E-04
P2K2	5.76E-04	1.92	0.003286	0.000889	8.14E-04
P4SCRB	1.15E-03	3.84	0.006564	0.000170	1.63E-03

TOXIC AIR POLLUTANTS - STANDARD NO. 8			
Emission Point ID	**Emission Rates (lbs/hr)**		
	Phosphorus 7723-14-0	Selenium	**HF**
P2K1	0.008889	2.60E-03	2.190
P2K2	0.008889	2.60E-03	2.190
P4SCRB	--	5.20E-03	0.825

ATTACHMENT - Emission Rates for Ambient Air Standards

Forterra Brick, LLC – Columbia Facility
TV-1900-0010

TOXIC AIR POLLUTANTS - STANDARD NO. 8		
POLLUTANT	**CAS NUMBER**	**Facility Wide Emission Rates (lbs/day)**
Antimony Compounds	+	0.029
Carbon Disulfide	75-15-0	0.029
Carbon Tetrachloride	56-23-5	0.000
Chlorine	7782-50-5	0.847
Chlorobenzene	108-90-7	0.009
Chloroform	67-66-3	0.000
Cobalt Compounds	+	0.002
p-Cresol [2-methyl-phenol]	106-44-5	0.001
Dibenzofuran	132-64-9	0.000
Dibutyl Phthalate	84-74-2	0.091
Diethyl Phthalate	84-66-2	0.157
Dimethyl Phthalate	131-11-3	0.000
p-Dichlorobenzene [1,4-dichlorobenzne]	106-46-7	0.033
Dioctyl phthalate	117-84-0	0.005
Ethyl Benzene	100-41-4	0.038
Ethyl Chloride [Chloroethane]	75-00-3	0.376
Ethylidene Chloride [1,1-dichloroethane]	75-34-3	0.002
Formaldehyde	50-00-0	0.116
Isophorone	78-59-1	0.013
Methyl Bromide [Bromomethane]	74-83-9	0.01042
Methyl Chloride [Chloromethane]	74-87-3	0.484
Methyl Chloroform [1,1,1-Trichloroethane]	71-55-6	0.104
Methyl Ethyl Ketone (2-Butone) [MEK]	78-93-3	0.252
Methyl Iodide [Iodomethane]	74-88-4	0.060
Methylene Chloride	75-09-2	0.000
Naphthalene	91-20-3	0.045
Perchloroethylene [Tetrachloroethene]	127-18-4	0.002
Phenol	108-95-2	0.071
Styrene	100-42-5	0.013
Toluene	108-88-3	0.213

ATTACHMENT - Emission Rates for Ambient Air Standards

Forterra Brick, LLC – Columbia Facility
TV-1900-0010

TOXIC AIR POLLUTANTS - STANDARD NO. 8		
POLLUTANT	**CAS NUMBER**	**Facility Wide Emission Rates (lbs/day)**
Vinyl Acetate	108-05-4	0.000
m/p-Xylene	108-38-3 106-42-3	0.100
o-Xylene	95-47-6	0.058

Attachment - Applicable and Non-Applicable Federal and State Regulations

Forterra Brick, LLC – Columbia Facility
TV-1900-0010
PAGE 1 OF 1

The following contains the Federal and South Carolina air pollution regulations and their applicability, as specified in the Part 70 permit application.

APPLICABILITY DETERMINATION		
Citation	**Regulation**	**Applicable (Yes / No)**
SC Regulation 61-62.1, Section II	Permit Requirements	Yes
SC Regulation 61-62.5, Standard No. 4, Section IX	Visible Emissions (Where Not Specified Elsewhere)	Yes
SC Regulation 61-62.5, Standard No. 4, Section VIII	Other Manufacturing	Yes
40 CFR 60 Subpart OOO	Standards of Performance for Nonmetallic Mineral Processing Plants	Yes
40 CFR 64	Compliance Assurance Monitoring	No